June 6, 2006

Mary L. Cottrell, Department Secretary Department of Telecommunications & Energy One South Station, 2<sup>nd</sup> Floor Boston, MA 02110

Re: Compliance with G.L. c. 164, § 116B pursuant to D.T.E. 06-48

Dear Ms. Cottrell:

On May 19, 2006, the Department of Telecommunications and Energy ("Department") issued an <u>Order Opening an Investigation into Compliance with G.L. c. 164, § 116B</u> ("Order"). This matter was docketed as D.T.E. 06-48. Pursuant to the Order, the Department directed all gas companies and municipal operators established under the provisions of Chapter 164 to file procedures and other materials pertaining to each's compliance with § 116B, including an excel spreadsheet of service territory streets that were paved in 2005. Order at 3. New England Gas Company ("Company" or "NEGC"), which provides gas distribution service to its customers in Massachusetts through its Fall River and North Attleboro service areas, takes this opportunity to provide its response to the Department's directive.

First, by way of background, the Company filed its initial responses regarding compliance with § 116B on November 12, 2004. In that filing, NEGC indicated to the Department that it conducted compliance inspections on an informal basis, that while the Company provided the needed materials to municipal or state contractors performing street, road or sidewalk repairs, these contractors themselves raised the valve boxes in conjunction with their projects. Additionally, NEGC informed the Department that following the municipal or state contractor's completion of the public way project, the Company conducted a field visit to verify that the work had been done in a safe and reliable manner.

While all of the above remains true today, the Company has taken several measures to formalize its past practices. First and foremost, since 2003 the Company has been in the process of consolidating and revising its Operations & Maintenance

("O&M") manual from what had, prior to the creation of NEGC, previously been five different O&M manuals. While this consolidation continues today, a copy of the relevant sections of the Company's most recent draft, which will certainly be different than the version currently on file with the Department, has been provided in response to your inquiry.

Along with the draft O&M, the Company is attaching its current Specifications and Standards for Underground Street Valves ("CM26"). As CM26 shows, the Company, as of January 31, 2006, has formalized its previously informal process to prevent street line valves from becoming inaccessible in cases where street restoration projects are undertaken by state or municipalities, including the repairs of streets, roads or sidewalks. As a matter of course, the Company's Engineering and Construction & Maintenance Departments annually request from all state and municipal offices an accurate and timely listing of their proposed street reconstruction and paving projects. Based on the information gathered from those requests, the Company compiles a list of the jobs to be done in its service areas and reviews the histories of the distribution mains to insure that any scheduled or planned work on those mains are concluded prior to the actual paving dates as submitted by the state or municipality. Upon completion of the paving, the Company has established a maintenance program to verify that each curb box is immediately accessible, and NEGC personnel follow up the completion of a public way project by conducting field visits to verify that the work has been done in a proper and safe manner. To insure that all such projects are reviewed and verified. Engineering and Construction and Maintenance again send a letter to the state and each municipality in the fourth quarter of the calendar year seeking an updated listing to verify that no additional projects were done without Company knowledge and therefore remain in need of inspection.

To that end, and in compliance with the Department's request for information, the Company has also provided as an attachment to this response its 2005 list of street paving projects in NEGC's Fall River and North Attleboro service areas. As this list will show, the Company has listed the proposed projects by municipality, with a description of the street in question for the project, the limits of the scope of the project, and whether upon completion those projects were inspected by Company personnel to confirm that the curb box is easily and immediately accessible. As the spreadsheet will show, all projects provided by the state or municipalities in 2005 and completed during the course of 2005 have been inspected for compliance with § 116B.

The Company believes that the attached materials will show that it is in compliance with § 116B and the Pipeline Division's interpretations. Thank you for the opportunity to provide this information. Should you have any questions concerning the Company's responses, please contact me at (401) 574-2212.

Sincerely,

Kevin/F. Penders, Esq.

Manager of Regulatory Relations New England Gas Company

#### enclosures

cc: William H. Stevens, DTE (2) Christopher Bourne, DTE (2) John K. Habib, Keegan Werlin

Michael Sullivan, NEGC

Response to Pipeline Engineering & Safety Division DTE 06-48

#### Attachment 1

**Draft Operations & Maintenance Manual** 

#### Contents:

- 351 Scope
- 353 Customer meters and regulators: Location.
- 355 Customer meters and regulators: Protection from damage.
- 357 Customer meters and regulators: Installation.
- 359 Customer meter installations: Operating pressure.
- 361 Service lines: Installation.
- 363 Service lines: Valve requirements.
- 365 Service lines: Location of valves.
- 367 Service lines: General requirements for connections to main piping.
- 369 Service lines: Connections to cast iron or ductile iron mains.
- 371 Service lines: Steel.
- 373 Service lines: Cast iron and ductile iron.
- 375 Service lines: Plastic.
- 377 Service lines: Copper.
- 379 New service lines not in use.
- 381 Service lines: Excess flow valve performance standards.
- 383 Excess flow valve customer notification.

#### References:

ANSI Z21.80

49 CFR, Part 192

#### 351 Scope

The installation of customer meters, service regulators, service lines, service line valves and service line connections to mains shall be performed in accordance with this section.

#### 353 Customer meters and regulators: Location

- 353.1 Preferred location for the installation of meters and regulators shall be outside.

  The location shall also provide for accessibility, maintenance and protection from potential damage.
- 353.2 When unable to provide for outside installation, meters and service regulators shall be located within the building nearest to the service line entrance as possible.
- **353.3** Adequate ventilation shall be provided for all inside installations. The location shall also provide for a 3 foot clearance from excessive heat or any source of ignition.
- 353.4 The upstream regulators in a series shall be located outside the building and may be buried, above ground or located in a separate metering/regulator structure. Deviation from these location requirements shall be approved by the Director of Engineering or his designee. When the demand exceeds the capacity of a single regulator, regulators in parallel configurations may be utilized to meet load requirements.

#### 355 Customer meters and regulators: Protection from damage

355.1 Protection of the gas distribution system shall be provided if a customer's utilization equipment could potentially create a backpressure or a vacuum condition. Devices

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- such as check valve(s) or backpressure regulator(s), low pressure slam-shut valve(s) or other approved devices may be utilized
- 355.2 Relief and service regulator vents shall terminate outdoors, located away from any opening into the building or air intake and where gas can escape freely. These vent openings shall also provide for the exclusion of insects, be sheltered from rain and shall be located such as to be protected from becoming submerged.
- 355.3 Customer meters or regulators located in pits or vaults shall be protected from damage if there is a possibility of vehicular traffic. Access doors or covers shall provide adequate support for anticipated vehicular traffic.
- 355.4 Vent pipes shall be constructed of metallic material.

#### 357 Customer meters and regulators: Installation

- 357.1 Meters and regulators shall be installed in a manner that shall minimize stresses upon the meter, regulator and associated piping. Some acceptable methods of support would include but are not limited to the following; hangers from floor joist, wall brackets, concrete pads and fabricated pipe supports.
- 357.2 Minimum wall thickness specifications shall be maintained when utilizing close all-thread nipples.
- 357.3 Easily damaged materials such as lead or plastic may not be used as connectors in the installation of meters or regulators.
- **357.4** Regulators located indoors shall be vented outdoors.

#### 359 Customer meter installation: Operating Pressure

- 359.1 Meters that are installed and placed in service shall not be subjected to more than 67% of the specified manufacturer's shell test pressure.
- 359.2 Meters installed after November 12, 1970, shall have been tested to a 10 p.s.i g. minimum test pressure before being placed in service.
- 359.3 Tinned steel case meters shall be restricted to low pressure inside installations. Tinned steel case meters shall not be subjected to more than 50 % of the test pressure used to certify the meter after being repaired or rebuilt.

#### 361 Service Lines: Installation

- 361.1 Each service line shall be installed in accordance with 49 CFR, Part 192, Section 361 with a minimum of 12 inches of cover on private property and 18 inches in public ways.
- **361.2** Backfill shall be performed in accordance with the Company Specifications and Standards.
- 361.3 Installations shall be done in such a way as to prevent strain on the pipe and also to withstand all anticipated external loading.
- 361.4 Steel service lines installed below ground through a foundation wall shall be protected from corrosion and the penetration sealed to prevent leakage into building.

Customer Meters, Service Regulators, and Service Lines

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- 361.5 Plastic service lines installed below ground through a foundation wall shall be encased, protected from shearing and sealed to prevent leakage into building.
- 361.6 Underground nonmetallic service lines not encased shall have a means of locating the pipe that complies with section 321 of this plan,
- 361.7 Service lines shall not be installed under buildings unless designed by the Company Engineering Department and approved by the Director of Engineering.

#### 363 Service lines: Valve requirements

- 363.1 Valves installed on service lines shall meet the applicable requirements of Subparts B and D of this plan. By-pass valves, intended to maintain gas flow when changing a meter, shall not be used as a service line valve.
- 363.2 Service line valves manufactured with "soft seats" shall not be used if exposure to excessive heat could cause the valve to malfunction.
- 363.3 Tamper proof valves shall be installed on high pressure service lines if located above ground. These valves shall be designed such as to prevent the removal of the core without the use of a special tool.

#### 365 Service lines: Location of valves

- **365.1** Service line valves shall be upstream of the regulator and where no regulator is used, shall be upstream of the meter.
- 365.2 Each service line shall have a valve and the location of the valve shall be outside the building wherever possible..

#### **Massachusetts Only**

Service lines two inches in diameter or larger and service lines operating at elevated pressures shall require an underground valve located in close proximity to the property line. Whenever gas is connected to a building where large numbers of persons assemble such as schools, churches factories, an outside service line valve shall be required regardless of size of service line. All underground curb shut-offs shall be *readily identifiable* and available for *easy access* by gas company personnel.

365.3 Where a service line valve is installed underground, it shall be accessible through a valve box and installed as close to the property line as possible. The valve box shall be installed to avoid strain on the service line and valve.

#### 367 Service lines: General requirements for connections to main piping

- 367.1 Service line connections at the main shall be at the top wherever possible. Sidetaps shall be allowed when the proper depth cannot be achieved.
- Wherever a compression-type fitting is used to connect a service line to the main, it shall comply with the following:
- **367.2.1** It shall be installed to withstand longitudinal pullout and thrust forces and protect against both internal and external loading.

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Customer Meters, Service Regulators, and Service Lines

**367.2.2** Wherever gaskets are used they shall be compatible with both natural gas and propane.

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#### 369 Service lines: Connections to cast iron or ductile iron mains

Service lines connected to cast or ductile iron shall meet the requirements of 49 CFR, Part 192, Section 273 and Section 151, unless a mechanical clamp is used.

#### 371 Service lines: Steel

Steel service lines shall be constructed with pipe designed for a minimum of 100 p.s.i.g.

#### 373 Service lines: Cast iron and ductile iron

Cast or ductile iron pipe shall not be installed for service lines.

#### 375 Service lines: Plastic

- 375.1 Plastic service lines installed outside a building shall be below ground level unless installed in accordance with 49 CFR, Part 192, Section 321.
- 375.2 Plastic service lines may terminate above ground level and outside a building if the above ground level part of the plastic service line is protected against deterioration, external damage and the plastic service line is not used to support external loads.
- 375.3 Plastic service lines installed within a building shall be protected against external damage.

#### 377 Service lines: Copper

Copper service lines installed within a building shall be protected against external damage.

#### 379 New service lines not in use

One of the following requirements shall be met when a new service line is placed in service but not used:

- 379.1 A locking device designed to prevent the unauthorized operation of the service line valve, which controls the flow of gas to the customer, shall be provided. This device may be an integral component of the valve assembly.
- 379.2 The service line or meter bar shall be secured with a mechanical device or fitting to prevent the flow of gas.
- 379.3 A physical separation of the gas supply piping and customer piping shall exist and open pipe ends plugged or capped.

#### 381 Service lines: Excess flow valve performance standards

381.1 Excess flow valves shall be used on single residence service lines which operate continuously throughout the year at a pressure not less than 10 p.s.i.gage, shall be manufactured and tested by the manufacturer according to industry

Customer Meters, Service Regulators, and Service Lines

specifications, and complies with 49 CFR, Part 192, Section 381.

**381.2** Excess flow valves shall meet the applicable requirements of Subparts B and D of this plan.

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- 381.3 The presence of an excess flow valve in the service line shall be marked or otherwise identified.
  - **381.4** Excess flow valves shall be located as near as practical to the fitting connecting the service line to its source of gas supply.
  - 381.5 Excess flow valves shall not be installed on a service line where there has been prior experience with contaminants in the gas stream that may cause the excess flow valve to malfunction or where the excess flow valve would interfere with necessary operation and maintenance activities on the service line.

#### 383 Excess flow valve customer notification

Not required due to voluntary installation of excess flow valves by the Company. See Section 381 of this part.



Section 192 **Subpart H**Customer Meters, Service Regulators, and Service Lines Operating and Maintenance Plan

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Response to Pipeline Engineering & Safety Division D.T.E 06-48

#### Attachment 2

Specifications and Standards for Underground Street Valves CM 26, Dated January 31, 2006

### **Underground Street Valves (MA Only)**

#### **Contents:**

- 1 Scope
- 2 General Notification
- 3 Requirements
- 4 Maintenance Program
- 5 Remedial Action
- 6 Records

#### References:

49 CFR, Part 192 MA 220 CMR Operating and Maintenance Plan Operator Qualification

#### 1 Scope

This standard describes the program, as required by applicable pipeline safety regulations, or as determined by the Company, to prevent street lines valves from becoming inaccessible in cases where street restoration projects are undertaken by state or municipalities including the repairs of streets, roads or sidewalks.

**NOTE:** This includes All underground curb shut offs installed on immediate or high pressure service lines and all services 2" in diameter or larger on service lines supplying gas to a theater, church, school, factory or other buildings where large numbers of people assemble.

#### 2 General - Notification

The Engineering and Construction & Maintenance Departments shall proactively send out informational letter requests to all state and municipal officials requesting an accurate & timely listing of their proposed street reconstruction and paving projects. An initial letter shall be sent out in 4<sup>th</sup> quarter of each year requesting both a finalized listing of the confirmed paving projects for that year as well as a proposed listing for the upcoming year. A follow-up letter shall then be sent out in the spring of the following year requesting an updated listing of proposed construction and paving projects for that year.

Based upon the information gathered from these requests, a proposed street reconstruction and paving project listing shall be compiled by the company of all municipal and state agencies.

Distribution mains, as part of the proposed projects, should then be reviewed to ensure that any scheduled or planned work on those

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streets are completed prior to the actual paving dates – as submitted from municipal and state agencies.

#### 3 Requirements

Company personnel shall then ensure that whenever the commonwealth or a city or town undertakes the repairs of streets or roads or sidewalks the appropriate gas company shall provide for the maintenance and improvements of its gate boxes located on the streets, roads or sidewalks to be repaired, so that the gate boxes are more *easily* and *immediately accessible*.

Methods for ensuring this requirement is met include but are not exclusive to:

- **A.** Utilization of in-house company crews when needed to repair and ensure gate boxes are accessible as part of municipal projects.
- **B.** Providing the needed materials to state and municipal paving contractors performing street, road or sidewalk repairs to raise and or lower the valves boxes in conjunction with their projects

#### 4 Maintenance Program

A maintenance program shall be administered by the company to verify that each curb box is immediately accessible in cases where street restoration projects are undertaken by state or municipalities including the repairs of streets, roads or sidewalks.

Upon the municipal or state contractor's completion of the public way project, qualified personnel will conduct field visits to the project sites to verify that the work has been done and in proper & safe manner and that existing valve boxes are easily and immediately accessible.

NOTE: For underground curb shut-offs on all intermediate and high-pressure service lines and all service lines two inches in diameter or larger supplying gas to a theater, church, school, factory or other buildings, the company shall utilize data from its GIS mapping system to identify specific valve locations. Qualified personnel shall then be used to verify that all valve boxes are easily and immediately accessible -- as part of the Public Building Survey Program.

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## **Underground Street Valves (MA Only)**

5	Remedial Action Remedial action items discovered, as part of these Field Visits shall be documented on an appropriate Work Order form – for the Construction & Maintenance Department. This includes corrective actions taken during the patrol, those requiring follow-up, and the suspension of further activity.
6	Records  The Company shall maintain documentation of the maintenance program for a period of time not less than two years from the most current street paving listing: in the form of electronic, paper, or other storage media accepted by the company.

Response to Pipeline Engineering & Safety Division D.T.E. 06-48

#### Attachment 3

2005 Street Paving List for Massachusetts Service Areas

#### **2005 STREET PAVING**

			2005 STREET PAVING	
	Town	Street	<u>Limits</u>	Inspected
	Somerset	Washington Ave.	Riverside Ave. to County St.	X
	Somerset	Pratt Ave.	Riverside Ave. to County St.	Х
	Somerset	Tyler Ave.	Washington Ave. to Pratt Ave.	Х
	Somerset	McKinley Ave.	Pratt Ave. to Roosevelt Ave.	Х
2005	Somerset	Foley Ave.	County St. Brayton Ave.	X
2005	Somerset	Perron Ave.	County St. to Dead End	X
2005	Somerset	Fairview Ave.	Read St. to Perron Ave.	X
2005	Somerset	Mt. Vernon Ave.	Read St. to Perron Ave.	X
	Somerset	Harold Ave.	Read St. to Perron Ave.	X
	Somerset	Willow Ave.	Read St. to Perron Ave.	X
	Somerset	Smith Ave.	Read St. to Perron Ave.	X
	Somerset	Bovin Ave.	Read St. to Perron Ave.	X
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2005	Swansea	Falls Rd.		x
	Swansea	Caribou Lane		x
	Swansea	Buck Lane		
	Swansea	Fawn Rd.		X
	Swansea	Wolf Hill Dr.	To Civelo	X
			To Circle	X
	Swansea	Cliffe Ave.	Olike to Mile	X
	Swansea	Massasoit Ave.	Cliffe to Metacomet	Х
2005	Swansea	Anthony Ave.		X
	<u> </u>			
	Westport	Sanford Rd.	Rt. 6 south to Rt. 177	X
	Westport	Drift Rd.	Rt. 88 north to Hix Bridge Rd.	Х
	Westport	Drift Rd.	Hix Bridge north to Old County Rd.	Х
	Westport	Main Rd.	Westport Point to Santos Farm	Х
2005	Westport	Hotel Hill Rd.	Rt. 88 south to Main Rd.	Х
2005	Fall River	Highland Ave. (North)	Roberson St. to Wilson Ave.	Х
2005	Fall River	Dexter St.	Highland Ave. to Robeson Ave.	X
2005	Fall River	Robeson Street	New Boston Rd. to Highland Ave.	X
2005	Fall River	Highland Ave. (South)	Maple St. to President Ave.	X
2005	Fall River	Pleasant St.	Eastern Ave. to Quarry St.	X
	Fall River	Laurel St.	Tucker St. to Newton St.	X
	Fall River	Bedford St.	Eastern Ave. to Reservior	X
	Fall River	Columbia St.	South Main to Milliken Blvd.	x
	Fall River	David St. (East)	N. Eastern Ave. to Dead End	X
	Fall River	Delcar St.	Highland Ave. to Robeson St.	
	Fall River	Field St.	Carl St. to Stafford Rd.	X
	Fall River	George St.		X
	Fall River		Davol St. to Murry St.	X
		Green St.	Central St. to Pine St.	X
	Fall River	Mcdonald Modon St	Brightman St. to George St.	X
	Fall River	Morton St.	Brightman St. to George St.	X
	Fall River	Murry St.	Brightman St. to George St.	X
	Fall River	Sampson St.	State St. to Dead End	X
2005	Fall River	South Main St.	Pocasset St. to Morgan St.	Х
	Plainville	West Bacon	Rt. 1A to Fletcher	Х
2005	Plainville	Rt. 152 and Rt. 106	Intersection	Х
		Falmouth St.	Smith St. to Falmouth St. #2	Х
2005	N. Attleboro	Falmouth St. #2	South Dead End to North Dead End	X
	N. Attleboro		100' N. of West St. to Dead End	X
	N. Attleboro		Elmwood St. to Cross St.	x
	N. Attleboro		Elmwood St. to Hawthorne St.	x
	N. Attleboro		Smith St. to Dead End	x
			Spruce St. to Mt. Hope St.	x
			1470' N. of Robert F. Toner to Robert F. Toner Blvd.	
	N. Attleboro	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAME	Robert F. Toner Blvd. To Bob Larson Way	X
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2005	N. Attleboro	Stanley St.	Commonwealth Ave. Towne St.	Х
2005	N. Attleboro	Broadway	High St. to West St.	Х
2005	N. Attleboro	Leonard St.	Broad St. to Broadway	Х
2005	N. Attleboro	Circular St.	Leonard St. to West St.	Х
2005	N. Attleboro	Pleasant St.	Broad St. to Broadway	Х
2005	N. Attleboro	Tonner Blvd.	Rt. 95 Overpass to Stanley St.	Х